

Please amend the claims as follows:

1. (Cancel) A method comprising:

forming a lower cladding layer, said lower cladding layer having at least one waveguide support, said at least one waveguide support being raised relative to said lower cladding layer such that said at least one waveguide support has a waveguide support width dimension and a waveguide support height dimension;

forming a core material onto said at least one waveguide support; and

forming an upper cladding layer over said core material.

2. (Currently Amended) The method of Claim 41 wherein said upper cladding layer and said lower cladding layer surround said core material.

3. (Cancelled)

4. (Currently Amended) A method comprising:

forming a lower cladding layer, said lower cladding layer having at least one waveguide support, said at least one waveguide support being raised relative to said lower cladding layer such that said at least one waveguide support has a waveguide support width dimension and a waveguide support height dimension;

forming a core material onto said at least one waveguide support; and

forming an upper cladding layer over said core material. The method of Claim 41

wherein said forming of said core material is by using a high density plasma chemical vapor deposition (HDPCVD) process.

5. (Currently Amended) The method of Claim 14 wherein said core material is an oxide.

6. (Currently Amended) A method comprising:

forming a lower cladding layer, said lower cladding layer having at least one waveguide support, said at least one waveguide support being raised relative to said lower cladding layer such that said at least one waveguide support has a waveguide support width dimension and a waveguide support height dimension;

forming a core material onto said at least one waveguide support; and

forming an upper cladding layer over said core material;

The method of Claim 1 wherein the step of forming said lower cladding layer comprises:

blanket depositing lower cladding material onto a substrate; and

patterning and etching said lower cladding material to form said waveguide support.

7. (Cancelled)

8. (Currently Amended) The method of Claim 14 wherein said core material is doped with a rare earth element.

9. (Currently Amended) The method of Claim 4 wherein the steps of forming said core material and forming said upper cladding layer are *in situ* with each other.

10. (Currently Amended) The method of Claim 6 wherein said waveguide support width dimension is less than said waveguide height dimension.

11. (Previously presented) A method comprising:

forming a lower cladding layer, said lower cladding layer having at least one waveguide support, said at least one waveguide support being raised relative to said lower cladding layer such that said at least one waveguide support has a waveguide support width dimension and a waveguide support height dimension, said waveguide support width dimension less than said waveguide support height dimension;

forming a core material onto said at least one waveguide support using a high density plasma chemical vapor deposition (HDPCVD) process, wherein said core material is an oxide; and

forming an upper cladding layer over said core material, wherein said upper cladding layer and said lower cladding layer surround said core material.

12. (Previously presented) The method of Claim 11 wherein the step of forming said lower cladding layer comprises:

blanket depositing lower cladding material onto a substrate; and

patterning and etching said lower cladding material to form said waveguide support.

13. (Previously presented) The method of Claim 11 wherein the step of forming said core material is performed such that said core material is doped with a rare earth element.

14. (Cancelled)

15. (Cancelled)

16. (Previously presented) The method of Claim 11 wherein the steps of forming said core material and forming said upper cladding layer are *in situ* with each other.

17. (Cancelled)

18. (Cancelled)

19. (Cancelled)

20. (Previously presented) The method of Claim 11 wherein said core material is non-rectangular.